

# User manual

## Vacuum mixers

### WAMIX Classic/Injector



**Wamix Classic**



**Wamix Injector**

**WASSERMANN**  
DENTAL-MASCHINEN



Die Basis für Ihr Labor

*Dear customer,*

Thank you for choosing a product from the Wassermann range. Wassermann dental equipment incorporates the highest standards of quality and the latest technology. In order to enjoy maximum performance and years of trouble-free operation, please read this user manual carefully before you start work, and operate the unit according to the recommended guidelines.

**Please keep this user manual in a safe place where it can be referred to at any time.**

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## Table of contents

<b>TABLE OF CONTENTS.....</b>	<b>2</b>
<b>1 FEATURES.....</b>	<b>3</b>
<b>2 FOR YOUR SAFETY .....</b>	<b>3</b>
2.1 FOLLOW THE USER MANUAL.....	3
2.2 SAFETY GUIDELINES .....	4
2.3 RESPONSIBILITY FOR OPERATION OR DAMAGE.....	4
<b>3 APPLICATIONS.....</b>	<b>5</b>
<b>4 BEFORE YOU START.....</b>	<b>5</b>
4.1 UNPACKING/TRANSPORT .....	5
4.2 LOCATION / STORAGE .....	5
<b>5 STARTING THE MIXER .....</b>	<b>7</b>
<b>6 OPERATING THE MIXER.....</b>	<b>7</b>
6.1 VACUUM MIXING WITH THE WAMIX INJECTOR.....	8
6.2 VACUUM MIXING WITH THE WAMIX CLASSIC.....	9
<b>7 TROUBLESHOOTING.....</b>	<b>10</b>
<b>8 CARE AND MAINTENANCE .....</b>	<b>11</b>
8.1 CLEANING.....	11
8.2 SERVICING.....	11
8.3 WARRANTY.....	12
8.4 SPARE PARTS AND ACCESSORIES .....	12
8.5 REPAIRS.....	13
<b>9 TECHNICAL DATA.....</b>	<b>14</b>
<b>10 EC COMPLIANCE CERTIFICATE .....</b>	<b>15</b>

## 1 Features

**WAMIX** is a manufacturer of vacuum mixers used not only for mixing all kinds of plasters, embedding media and silicones, but also designed for specialised dental procedures and for vacuum-rinsing of prostheses.

When mixing silicones, make sure that the beaker is **only filled to the max. height for silicone**. Otherwise, silicone could penetrate the interior of the unit itself.

Units have separate drives for vacuum generation and for the mixing mechanism. The mixer in the **Wamix Classic** and **Injector** versions can be switched off at any point by a time switch, without breaking the vacuum.

Until changed, the current preset mixing time (up to 240 sec.) becomes the default for subsequent use. An audible signal indicates the end of the mixing process.

The vacuum is guaranteed because the beaker on the **Wamix Classic** and **Injector** is held to the flange by the vacuum. Mixers are supplied as wall units, but can be converted for tabletop use at any time. (For accessories, see 8.4)

## 2 For your safety

### 2.1 Follow the user manual

You should read and carefully follow the instructions in this user manual for setting up and operating the unit. The unit is intended only for the specified purpose.

**Especially important points** are highlighted as follows:



#### **Warning!**

This is a warning of risk situations and dangers. Failure to observe this warning could be life-threatening. These warnings must be observed.

### **Information!**



This symbol draws your attention to specific features that must be observed.

## **2.2 Safety guidelines**



This equipment is designed to operate at 230V / 50 Hz. Make sure it is always connected to the appropriate power supply.

Always remove the plug from the power socket before undertaking maintenance or cleaning work.

**A locking hook underneath each unit prevents it coming loose once it has been mounted in the bracket.**

Allow the condensers to discharge before opening the unit.

## **2.3 Responsibility for operation or damage**

The responsibility for operating the unit lies exclusively with the owner or user if the said unit is incorrectly serviced, maintained or altered by persons not employed by an authorised dealer or if the unit is used in a manner contrary to its specified purpose.

The unit must be maintained and operated in accordance with this user manual. Wassermann Dental-Maschinen GmbH is not responsible for damage arising from the **nonobservance** of these instructions.

Guarantee and responsibility provisions contained in the sales and supply conditions of Wassermann Dental-Maschinen GmbH are not extended by these instructions.



**Ensure that this user manual is accessible at all times and has been read and understood.**

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### 3 Applications

**WAMIX** equipment is used for mixing all kinds of plasters, embedding media and silicones under vacuum.

The vacuum can be as high as approx. 920 - 950 mbar.

This unit is also suitable for vacuum rinsing of models for special dental procedures. The insulating layer between the model and the prosthesis cannot separate prematurely because the model remains moister in the pressure-embedding unit than when water is used.

### 4 Before you start

#### 4.1 Unpacking/Transport

- Remove the packing materials and place the unit on a firm, level surface or use the supplied bracket to mount it on the wall. Check that all items have been supplied (see 8.4).
- Before transporting the unit, ensure that it has been unplugged from the power socket. Make sure that it is packed correctly in order to avoid accidental damage.

#### 4.2 Location / storage

- Place the unit on a flat surface where it is to be used or mount it on a wall.
  - If mounting on a wall, ensure that the wall is strong enough to support the unit. Detach the wall mount from the unit and use it as a template for drawing a **drilling scheme** to drill the Ø 8 mm diameter dowel holes. Leave **at least 30-35 cm free space** beneath the unit.
  - Always mount the unit allowing sufficient room for working and servicing (see dimensions) - **do not set up out of doors!** -
  - If the unit is to be stored for an extended period, protect it from moisture and dust.
-

- The following connections should be in place **before** initial use:
  1. Check that the mains voltage and the voltage requirements of the mixer are the same, then plug in the power cable.
  2. **Only for WAMIX Injector:**
- Install a compressed air line in accordance with the technical data. Be sure to use the correct hose size if the line is long (inside diameter min. 6 mm). Provide a servicing unit for each line and use a pressure regulator to maintain a constant pressure.



**Accidental mixing is not possible because the motor cannot start until the beaker is held to the rim by the vacuum. The mixing time also needs to be set.**



**Before you start your vacuum mixer, make sure that the safety hook (under the unit) has been turned through 180° (should fit in behind the wall mount). Pull the hook forwards using the slot, then retighten the screw on the hook to prevent it coming loose.**



**Warning: Use only beakers with the new curved seal (171708).**



**When using the 115 V version you have to install the power pack Order no. 171788. Therefore you plug in the conductor of the Wamix into the socket (Pos.1) of the power pack. The conductor of the power pack ( Pos.2) has to be plugged into the house socket. In order to mount the power pack at the table stand please use the enclosed screws M6.**





## 5 Starting the mixer

- Switch on green master switch (1) (vacuum mixing).
- Open compressed air valve (**WAMIX Injector only**)


### Only for WAMIX Injector:


- Turn the rotary knob to set the vacuum the **first time** the unit is used. The recommended input pressure is a minimum 5 bar. The **regulator knob (2) (Fig. 1)** is located on the right of the front panel. Open the valve slowly from zero until the needle is in the green zone. **The best vacuum will not be obtained if the valve is fully open - a middle setting is best.** This should be adjusted later if the pressure changes.


 **WAMIX Injector:** If the needle does not reach the green zone on the pressure gauge, there is too little flow to the unit. Check the compressed-air supply. (see also 4.2)


 If the equipment will not be used for an extended period, switch off the compressed air supply and the vacuum mixer.

## 6 Operating the mixer

 All instructions for using the unit, whether verbal, written or in the form of practical guidance, are based on individual experience and experimentation and can only be regarded as guidelines.

 Fill the beaker to the *Max marking*. The vacuum will draw any excess material into the system.

 The beaker will come away automatically once the vacuum is removed. To avoid damaging the seal, *never* remove the beaker by force.

 The sealing surfaces between the beaker and the plate must be clean - likewise the rotor fastenings and the beaker lid - to ensure trouble-free operation.

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## 6.1 VACUUM MIXING with the WAMIX Injector

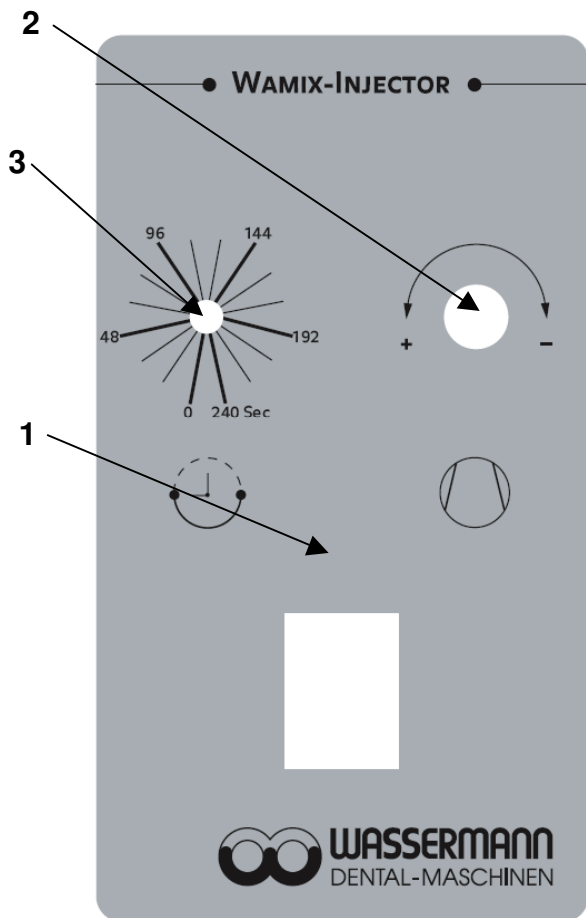


Fig. 1

1. Set the mixing time with the **timer (3)** (up to 240 sec.) (**automatic mixing**) - this remains the default until a new time is set. For **manual mixing**, turn the timer to "0", and set the desired mixing time after a vacuum is present.
2. Place the mixing materials in the beaker and mix by hand until the powder is **well mixed** with the liquid.
3. Seal the beaker with a lid.
4. Insert the beaker in the unit from below; the vacuum will be released automatically. Hold the beaker until the vacuum builds.
5. The mixer switches on automatically for the set time. **When the time has expired, an acoustic signal sounds.**
6. Take hold of the beaker before you switch off the **master switch (1)** (vacuum). After the vacuum in the beaker drops, the beaker will no longer be clamped to the unit.

## 6.2 VACUUM MIXING with the WAMIX Classic

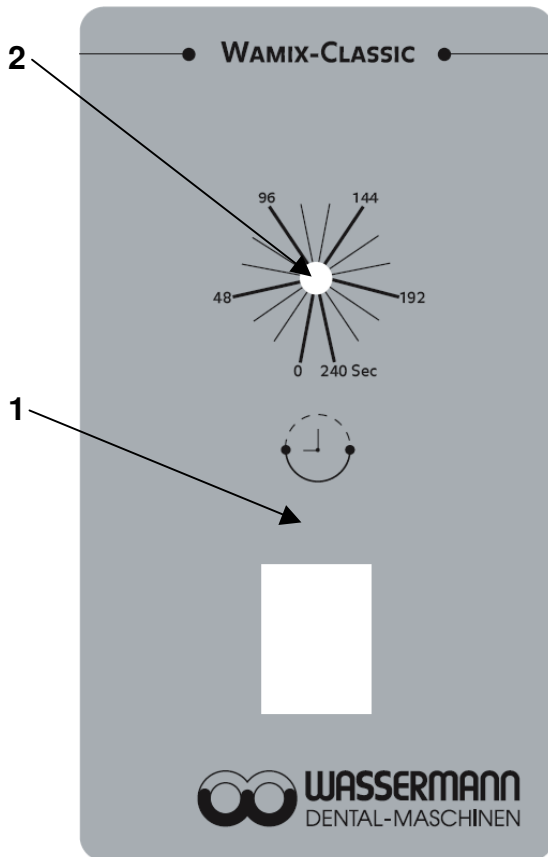


Fig. 2

1. Set the mixing time with the **timer (2)** (up to 240 sec.) (**automatic mixing**) - this remains the default until a new time is set. For **manual mixing**, turn the timer to "0", and set the desired mixing time after a vacuum is present.
2. Place the mixing materials in the beaker and mix well by hand until the powder is **well mixed** with the liquid.
3. Seal the beaker with a lid.
4. Insert the beaker in the unit from below; the vacuum will be released automatically. Hold the beaker until the vacuum builds.

5. The mixer switches on automatically for the set time. **When the time has expired, an acoustic signal sounds.**
6. Take hold of the beaker before you switch off the **master switch (1)** (vacuum). After the vacuum in the beaker drops, the beaker will no longer be clamped to the unit.

## 7 Troubleshooting

Problem	Likely cause	Likely solution
Mixer does not start	Blown fuse	Replace fuse and determine cause; otherwise, call Service Center
<b>WAMIX Injector/Classic</b>	Set timer to "0"	Set mixing time
Vacuum too low	Filter (vacuum) blocked	Check filter – clean and/or change (see 8.2)
	Leaking seal on vacuum flange for mixing beaker	Replace seal
No vacuum	Beaker filled above <i>Max</i> mark, i.e., mixing ingredients in system	Clean system, i.e., maintenance by Service Center
<b>Wamix Classic</b>	Faulty vacuum pump	Maintenance by Service Center
<b>WAMIX Injector</b>	Set pressure regulator to "0" (pressure gauge).	Check and set pressure if necessary.
	Set timer to "0"	Set time.
Beaker falls out	Faulty seal	Replace seal (171708)



If the above suggestions do not solve the problem, get in touch with your dental depot or our Service staff.

**Service number : Wassermann Dental – Maschinen**

**+49 (0)40 / 730 926 – 0**

## 8 Care and maintenance

### 8.1 Cleaning

The unit should be cleaned at regular intervals to ensure problem-free operation. It requires only normal cleaning (sponge, damp cloth, mild detergent) - no chemical additives.

Solvents ***must not*** be used to clean the front panel!

Keep the beaker clean. When not in use, fill with water to just below the mixer.

The **model plate** must always be legible and should not be removed.

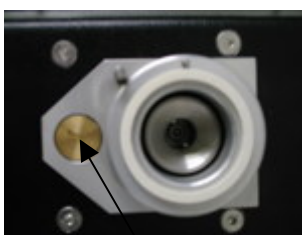
### 8.2 Servicing



**Allow the condensers to discharge *before* you open the mixer.**

Our vacuum mixers do not require servicing. Make sure the unit is kept clean and that the rim seal for the beaker (vacuum seal) is not damaged.

#### Changing the filter:



1

Remove screw (1) (on the left, near the mixer mechanism on the rim under the unit). The filter swings loose at the forward end of the screw. After changing the filter, do up the screw *finger-tight* (do not forget the O-ring).

### 8.3 Warranty

The warranty period for our instruments is 12 months. If faults occur within the warranty period, contact your dental depot or get in touch directly with our Service department.

Vacuum mixers should only be operated in perfect condition. If faults occur which could harm operators or third parties, the unit should not be used until it has been fixed.

The warranty does not cover damage caused by improper use, external mechanical causes, transport damage or interference with the unit by unauthorised persons.

### 8.4 Spare parts and accessories

<b>Spare parts</b>	
Item no.	Name
171219	Filter knob
171771	Security hook
380018	O-ring 9.75 x 1.78
380023	O-ring 8 x 1.9
380069	Seal D56 x D46 x 4 white, self-adhesive one side
511161	Rocker switch, green IP65
560107	Rotary knob, black (WAMIX Injector only)
560108	Cap for rotary knob, black (WAMIX Injector only)
560111	Cap for black knob with white stripe
560112	Black knob with white stripe
582002	Fuse 2 A T 250 V - D 5 x 20
610025	Sintered filter ( for vacuum)
610028	Sound absorber (WAMIX Injector only)

<b>Accessories</b>	
Item no.	Name
Item no.	Name
171766	Wall mount
171760	Table clamp (not supplied)
171230	Beaker, small 200 ml (not supplied)
171237	Beaker, large 600 ml (not supplied)
171269	Beaker, extra large 1000 ml (not supplied)
171275	Vacuum rinse beaker, 600 (not supplied)
171283	Beaker, medium 350 ml
171290	Mounting set
171295	Beaker, extra small 75 ml ( not supplied)
171299	Adapter or "Inceram" (VITA) (not supplied)
320026	Compressed-air hose, blue D8 x 6 (2 m) ( WAMIX Injector)

### **8.5 Repairs**

Servicing or repairs to the unit must only be carried out by trained technicians. Only original spares are to be used. Responsibility for the product is voided if unauthorised persons alter it or if inappropriate components are installed.

## 9 Technical data

### 171987 WAMIX Classic vacuum mixer

Voltage:	230 V / 50 Hz
Power consumption:	1 A (Si 2 A)
Output:	150 W
Speed:	380 min <sup>-1</sup>
Mixing time:	up to 240 seconds, adjustable
Vacuum:	approx. 950 mbar
Safety class:	IP 22
Overall dimensions:	Width 205 mm Height 365 mm Depth 295mm
Weight:	11.8 kg without wall mount 13 kg with wall mount



### 171986 WAMIX Injector vacuum mixer

Voltage:	230 V / 50 Hz
Power consumption:	0.5 A (Si 2 A)
Output:	95 W
Speed:	380 min <sup>-1</sup>
Mixing time:	up to 240 seconds, adjustable
Vacuum:	approx. 950 mbar
Compressed air connector:	min. 5 bar
Safety class:	IP 22
Overall dimensions:	Width 205 mm Height 365 mm Depth 295mm
Weight:	11.5 kg without wall mount 12.7 kg with wall mount



Noise emission  $\leq 70 \text{ dB (A)}$



**We reserve the right to make technical changes!**

## 10 EC COMPLIANCE CERTIFICATE

**In accordance with 73/23/EWG (low-voltage guidelines) modified by 93/68/EWG and 89/336/EWG (EMV guidelines) and 89/392/EWG (Machinery guidelines), with modifications**

Manufacturer: W A S S E R M A N N      Product description: Vacuum mixer for  
Dental-Maschinen GmbH      dental applications  
Rudorffweg 15 - 17  
D-21031 Hamburg

Model:      Wamix Classic      (171987)  
                 Wamix Injector      (171986)  
                 Wamix Classic 115V      (171981)  
                 Wamix Injector 115V      (171980)

Applicable standards: EN 61010-1:1993 + A2: 1995  
                                 EN 50081-1 + EN 50082-1  
                                 DIN 45635 T.1

Hiermit wird bestätigt, daß die oben bezeichnete Maschine den genannten EG-Richtlinien entspricht. Diese Erklärung wird ungültig, falls die Maschine ohne unsere Zustimmung verändert wird.

This is to confirm that the above-mentioned machine complies with the described EC rules. This declaration becomes invalid if the machine is modified without our approval.


Cette machine est conforme aux normes en vigueur de la Communauté Européene. Cet avis est nul et non avenant si cette machine est modifiée sans notre accord.

Esta máquina, anteriormente mencionada, cumple con los limites requeridos por el reglamento EC. Ahora bien, esta declaración quedará invalidada en caso de realizar modificaciones al aparato sin nuestra aprobación.

Hiermee wordt bevestigd dat bovengenoemde machine voldoet aan de voorgeschreven EU normen. Deze verklaring verliest geldigheid als er zonder onze uitdrukkelijke toestemming wijzigen aan de machine worden aangebracht.

Place, date: Hamburg, 14 June 2005

Company stamp:

Signed:   
                 Wilfried Wassermann  
                 (Managing Director)





**Notes:**

**Notes:**





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